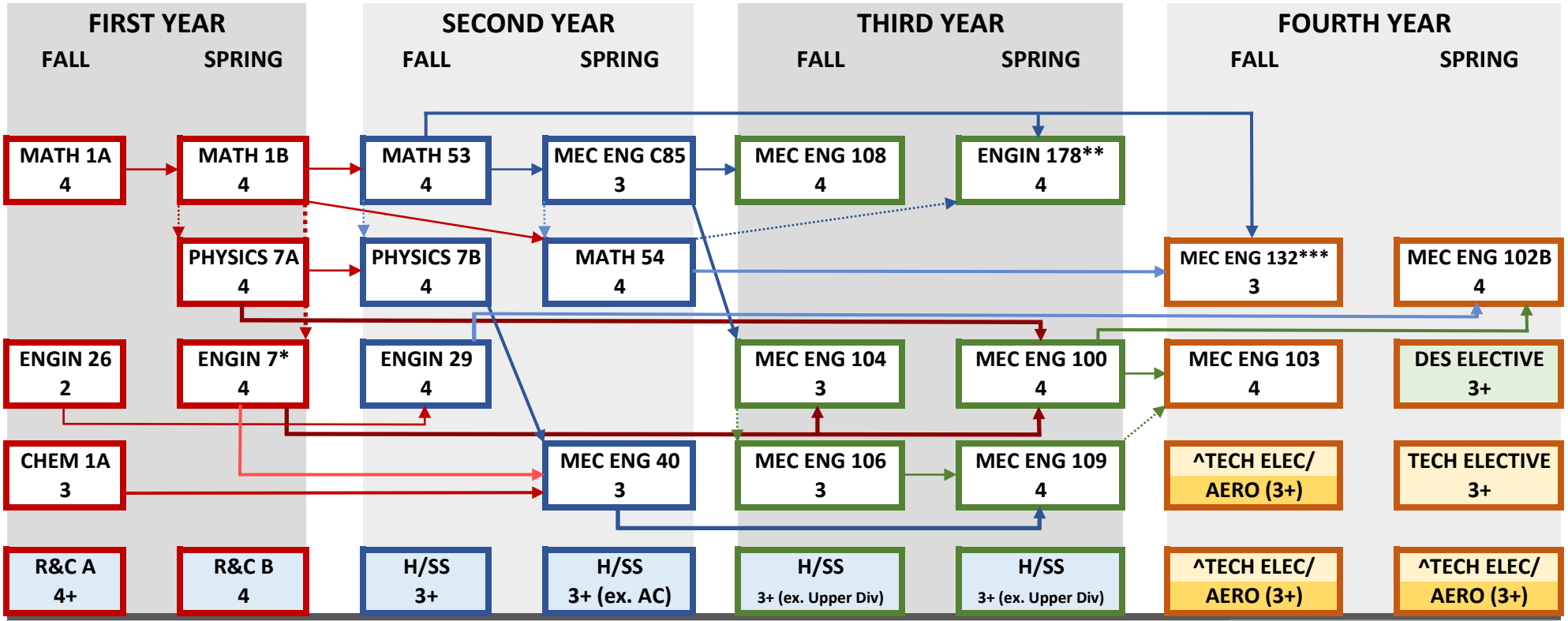
MECHANICAL ENGINEERING CURRICULUM FLOWCHART



COURSE # / # OF UNITS = PREREQ, = COREQ

GENERAL NOTES

*If prereqs are met, students are encouraged to take ENGIN 7 in frosh fall.

**For students who entered in 2021. Does not apply to students who entered before this.

***ME 132 is only a fall course.

• MATH 53 & 54 must be completed before taking any upper div ME course.

• Please be aware that though courses may not be listed as official prereqs, upper div courses are taught with the expectation that students have taken the lower div courses.

TECHNICAL ELECTIVE NOTES

• 15 units of tech elective are required.
• 9 of the 15 must be ME-sponsored.
• 1 Course must be from the Design list
• 1 Course must be from the QS list.
• 12 units must be upper div. A lower div course can count for up to 3 units but a lower div course is not required.
• Up to 6 of the 15 units may be taken from outside the dept; the rest must be ME-sponsored.
• MEC ENG 191K is not a tech course. It is an H/SS.

For a list of possible courses, please see https://me.berkeley.edu/undergraduate/technical-electives/

LOWER DIV OPTIONS

ASTRO 7A, 7B
BIO ENG 10
BIOLOGY 1A & 1AL, 1B
CHEM 1B, 3A*, 3B*, 4B
CIV ENG 11, 60, 70, 93
COMPSCI C8, 61A, 61B, 61C, 70
DES INV 15, 90E
EPS 50, N82
EECS 16B
ENGIN 11
INTEGBI 32*
MATH 55
MATSCI 45*
MCELLBI 32
PHYSICS 7C
STAT 20, 21
**Lab section not required.*

DESIGN COURSES

Courses below are ME-sponsored.
ENGIN 128, MEC ENG 101, MEC ENG 110, MEC ENG C117, MEC ENG 118, MEC ENG 119, MEC ENG 130, MEC ENG 133, MEC ENG C134, MEC ENG 135, MEC ENG 139, MEC ENG 146, MEC ENG 151, MEC ENG 165, MEC ENG C176, MEC ENG C178, MEC ENG 179

More options available here: https://me.berkeley.edu/undergraduate/design-elective/

QUANTITATIVE SCIENCE (QS)

This requirement seeks to endow students with QS skills to complement the intensive hands-on coures required in the upper division. *All of the courses below are considered ME-sponsored.*

ENGIN 117, ENGIN 150, ENGIN 177, MEC ENG C106A, MEC ENG 120, MEC ENG 127, MEC ENG 131, MEC ENG 136, MEC ENG C134, MEC ENG 139, MEC ENG 163, MEC ENG C180, MEC ENG 193B

Additional non-ME-sponsored courses can be found at: https://me.berkeley.edu/undergraduate/quantitative-science/

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PREQUISITES INFORMATION
COURSE SEQUENCING MATTERS

CHEM 1A	High school chemistry recommended
ENGIN 7	MATH 1B (may be taken concurrently)
ENGIN 26	None
ENGIN 29	ENGIN 26 or equivalent experience in three-dimensional solid modeling (e.g. Solidworks, Fusion 360) is recommended
ENGIN 178	ENGIN 7, MATH 1A, MATH 1B, and MATH 53; and MATH 54 (may be taken concurrently)
MATH 1A	3.5 years of high school math, including trigonometry and analytic geometry. Students with exam credits (such as AP credit) should consider choosing a course more advanced than 1A
MATH 1B	MATH 1A or MATH N1A
MATH 53	MATH 1B or MATH N1B
MATH 54	MATH 1B, MATH N1B, MATH 10B, or MATH N10B
PHYSICS 7A	High school physics; Math 1A; and Math 1B (which may be taken concurrently)
PHYSICS 7B	PHYSICS 7A, MATH 1A, MATH 1B, and MATH 53 (may be taken concurrently)
MEC ENG 40	CHEM 1A, ENGIN 7, MATH 1B, and PHYSICS 7B
MEC ENG C85	MATH 53 and MATH 54 (may be taken concurrently); PHYSICS 7A
MEC ENG 100	ENGIN 7, COMPSCI 10, COMPSCI 61A, COMPSCI C8, or equivalent background in computer programing; MATH 1A or equivalent background in calculus; PHYSICS 7A or equivalent background in physics
MEC ENG 102B	ENGIN 25, ENGIN 26, ENGIN 27; and EECS 16A or MEC ENG 100. Please note that junior transfer students are exempt from ENGIN 26
MEC ENG 103	MEC ENG 40; MEC ENG C85 / CIV ENG C30; MEC ENG 100; MEC ENG 106 (can be taken concurrently), and MEC ENG 109 (can be taken concurrently)
MEC ENG 104	MEC ENG C85 and ENGIN 7
MEC ENG 106	MEC ENG C85 / CIV ENG C30 and MEC ENG 104 (104 may be taken concurrently)
MEC ENG 108	MEC ENG C85 / CIV ENG C30
MEC ENG 109	MEC ENG 40 and MEC ENG 106
MEC ENG 132	MATH 53, MATH 54, PHYSICS 7A, and PHYSICS 7B

Note: The most current prereqs are located at http://guide.berkeley.edu/courses/

^FOR AEROSPACE CONCENTRATION

- TE MEC ENG 163 or ME/AE C162: Aerodynamics
- TE MEC ENG 136: Intro to Control of UAVs, satisfies QS requirement
- TE MEC ENG 127: ME Composite Materials.

The Aerospace minor requires additional coursework.
https://me.berkeley.edu/undergraduate/aerospace-minor/